ABSTRACT

A demodulator for use in a satellite communication system, which is operative for receiving a modulated signal having a data rate R (i.e., the demodulator receives R input samples per second). The demodulator includes a demultiplexer circuit having N shift registers, which functions to receive the R data samples per second as an input signal. The demultiplexer circuit operates to input the R input samples sequentially into the N shift registers such that each of the shift registers receives input samples at a data rate of R/N samples per second. The demodulator further includes signal recovery circuitry for processing the input samples contained in each of the N shift registers so as to regenerate the data contained in the incoming modulated signal transmitted by the satellite.